

## REMARKS

This responds to the Office Action received on February 6, 2007.

Claims 1 and 26 are amended and claims 28-29 are canceled. Claims 1-27 are now pending in this application. Additionally, Applicant requests that claims 3, 4, and 5, previously withdrawn, be included in the present examination.

### *Issue Raised in Office Action of February 6, 2007*

The Examiner objected to the amendment of 12/11/2006 because “the added language ‘serrations’ on the outer surface of the main body is a feature of the nonelected Fig. 7 embodiment, and this language has been added to all independent claims. ... Applicants should limit themselves to adding features from the elected embodiments of Figs. 4-6 in attempting to define over the prior art. “ Applicant has amended independent claims 1 and 26 to cancel reference to “serrations” and add “the design comprising one or more of a circle, a square or a rectangle.” Applicant requests that claims 3, 4, and 5, be considered in this response and the withdrawal be removed because these claims include features from Figures 4-6.

### *§112 Rejection of the Claims*

Claims 1-2 and 8-10 were rejected under 35 USC § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicants amended claim 1, “wherein all of the at least two different metals contact [the outer surface] a thermal interface material...”

The amended claim 1 is supported by the specification on page 3, lines 25-29. Thus, Applicants traverse the §112 rejection to claim 1. Claims 2 and 8-10 depend on claim 1, thus for the same reason as discussed for claim 1, Applicants traverse the §112 rejections to claims 2 and 8-10.

Applicants respectfully request the examiner to withdraw the §112 rejections to claims 1-2 and 8-10.

§102 Rejection of the Claims

Claims 1-2, 8-10, 26, and 28-29 were rejected under 35 USC § 102(e) as being anticipated by Vrtis.

To sustain an anticipation rejection under 35 USC § 102(e), each and every element in a rejected claim must be taught or suggested in the cited reference.

Applicants amended claim 1 as follows:

*1. A heat dissipating device, comprising: a main body having an outer surface that is plated or coated with at least two different metals, wherein all of the at least two different metals contact [the outer surface] a thermal interface material to form a design effective for bonding to solder and for adhering to polymer in [a] the thermal interface material, the design comprising one or more of a circle, a square or a rectangle.*

Vrtis does not teach “[A]a heat dissipating device, comprising: a main body having an outer surface that is plated or coated with at least two different metals, wherein all of the at least two different metals contact [the outer surface] a thermal interface material to form a design effective for bonding to solder and for adhering to polymer in [a] the thermal interface material. “Vrtis also does not describe a heat dissipating device where the design comprises one or more of a circle, square or a rectangle as is claimed. The Vrtis reference cannot then anticipate claim 1 or the claims that depend from claim 1..

Applicants amended claim 26 as follows:

*26. An electronic system, comprising:*

*an electronic assembly comprising a heat dissipating device, comprising: a main body having a surface that is plated or coated with at least two different metals to form a design effective for bonding to solder and for adhering to polymer in a polymer solder hybrid, , the design comprising one or more of a circle, a square or a rectangle.*

As discussed above, Vrtis does not teach “[A]a heat dissipating device, comprising: a main body having an outer surface that is plated or coated with at least two different metals, wherein all of the at least two different metals contact [the outer surface] a thermal interface

material to form a design effective for bonding to solder and for adhering to polymer in [a] the thermal interface material. "Vrtis also does not describe a heat dissipating device where the design comprises one or more of a circle, square or a rectangle as is claimed. The Vrtis reference cannot then anticipate claim 26 or the claims that depend from claim 26.

. Applicants canceled claims 28 and 29 without prejudice.

Therefore, Applicants respectfully request the examiner to withdraw the rejections to claims 1-2, 8-10, and 26, as well as claims 2 and 8-10 under 35 USC § 102(e), and to allow them.

#### §103 Rejection of the Claims

Claims 6-7 were rejected under 35 USC § 103(a) as being unpatentable over Vrtis in view of Jech et al.

To sustain a 35 USC § 103(a) rejection, each element of a rejected claim must be disclosed in the proposed combination of the cited documents as set forth in the Office Action.

Claims 6-7 are dependent on claim 1. Claim 6 further recites that the design comprises corner squares. Claim 7 further recites that design comprises a central square.

First, the examiner acknowledges that Vrtis does not go into detail regarding the pattern used to "mask off" areas of the copper substrate which are not to be coated and those which are.

Furthermore, Jech et al does not disclose the specific design which is positively recited in claim 6.

Therefore, Applicants submit that, even if combined, Vrtis and Jech et al do not teach each of the features recited in claims 6 and 7.

Thus, Applicants respectfully request the examiner to withdraw the rejections to claims 6 and 7 under 35 USC § 103(a) and to allow claims 6 and 7.

**AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111**

Serial Number: 10/612,834

Filing Date: June 30, 2003

Title: HEAT DISSIPATING DEVICE WITH PRESELECTED DESIGNED INTERFACE FOR THERMAL INTERFACE MATERIALS

Assignee: Intel Corporation

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Dkt: 884.945US1 (INTEL)

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney ((612) 373-6976) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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**CERTIFICATE UNDER 37 CFR 1.8:** The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 6th day of March 2007.

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Signature

